Audit of Timber Harvesting and Road Construction, Maintenance and Deactivation

Kamloops Forest District

Small Business Forest Enterprise Program

FPB/ARC/36

January 2001

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Report from the Board

A. Report from the Board

This is the Board's report on a compliance audit of the Kamloops Forest District Small Business Forest Enterprise Program (Kamloops SBFEP). The Kamloops SBFEP has 20 operating areas within the Kamloops Forest District, which is located in the southern interior of British Columbia (see attached map). The audit examined the Kamloops SBFEP's planning, field activities, and obligations related to timber harvesting and the construction, maintenance and deactivation of roads for the period September 1, 1999, to September 10, 2000.

The Report from the Auditor (Part C) provides further details on the location of the Kamloops SBFEP operating areas, the scope of the audit, and the audit findings. The Report from the Auditor is based on the audit procedures described in Part B[1].

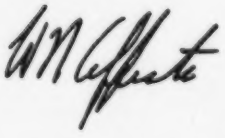
The Board considered the Report from the Auditor along with supporting audit evidence and affirms the auditor's findings and conclusions.

Conclusions

The Kamloops SBFEP's timber harvesting and road practices complied with Forest Practices Code (*Forest Practices Code of British Columbia Act* and related regulations) requirements in all significant respects.

The identified instances of non-compliance were relatively few in number and minor in nature; therefore, they were not considered worthy of reporting.

As evidenced through recent Board audits, the Board notes there is continuing attention to improvements in forest practices in the Small Business Forest Enterprise Program, provincially.



W.N. (Bill) Cafferata
Chair
January 11, 2001

[1] Part B of this document provides background information on the Board's audit program and the process followed by the Board in preparing its report.

Forest Practices Board Compliance Audit Process

B. Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government's and agreement holders' compliance with the *Forest Practices Code of British Columbia Act* and regulations (the Code). The Board is given the authority to conduct these periodic independent audits by section 176 of the Act. Compliance audits examine forest planning and practices to determine whether or not they meet Code requirements.

The Board undertakes both "limited scope" and "full scope" compliance audits. A limited scope audit involves the examination of selected forest practices (e.g., roads, or timber harvesting, or silviculture) and the related operational planning activities. A full scope audit examines all operational planning activities and forest practices.

The Board determines how many audits it will conduct in a year, and what type of audits (limited or full scope), based on budget and other considerations. The Board audits agreement holders who have forest licences or other tenures under the *Forest Act* or the *Range Act*. The Board also audits government's Small Business Forest Enterprise Program (SBFEP) which is administered by Ministry of Forests district offices. Selection of agreement holders and district SBFEPs for audit is done randomly, using a computer program, to ensure a fair, unbiased selection of auditees.

Audit Standards

Audits by the Forest Practices Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards.

The audits determine compliance with the Code based on criteria derived from the *Forest Practices Code of British Columbia Act* and its related regulations. Audit criteria are established for the evaluation or measurement of each practice required by the Code. The criteria reflect judgments about the level of performance that constitutes compliance with each requirement.

The standards and procedures for compliance audits are described in the Board's *Compliance Audit Reference Manual*.

Audit Process

Conducting the Audit

Once the Board selects an audit and decides on the scope of the audit (limited scope or full scope), the staff and resources required to conduct the audit and the period covered by the audit are determined. Board staff also meet with the party being audited to discuss the logistics of the audit before commencing the work.

All the activities carried out during the period subject to audit are identified; for example, harvesting or replanting sites and building or deactivating road sections during the audit period. The items that make up each forest activity are referred to as a "population." For example, all sites harvested form the "timber harvesting population." All road sections constructed form the "road construction population." The populations are then sub-divided based on factors such as the characteristics of the sites and the potential severity of the consequences of non-compliance on the sites.

The most efficient means of obtaining information to conclude whether there is compliance with the Code is chosen for each population. Because of limited resources, sampling is usually relied upon to obtain audit evidence, rather than inspecting all activities.

Individual sites and forest practices within each population have different characteristics, such as the type of terrain or type of yarding. Each population is divided into distinct sub-populations on the basis of common characteristics (e.g., steep ground vs. flat ground). A separate sample is selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to the sub-population where the risk of non-compliance is greater.

Audit work in the field includes assessments from helicopters and intensive ground procedures such as the measurement of specific features like road width. The audit teams generally spend two to three weeks in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code is more a matter of degree than absolute adherence. Determining compliance requires the exercise of professional judgment within the direction provided by the Board.

Auditors collect, analyze, interpret and document information to support the audit results. The audit team, composed of professionals and technical experts, first determines whether forest practices are in compliance with Code requirements. For those practices considered to not be in compliance, the audit team then evaluates the degree to which the practices are judged not in compliance. The significance of the non-compliance is determined based on a number of criteria, including the magnitude of the event, the frequency of its occurrence, and the severity of the consequences.

As part of the assessment process, auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet Code requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that a non-compliance event, or the accumulation and consequences of a number of non-compliance events, is not significant and is not considered worthy of reporting.

Significant non-compliance – where the auditor determines that the event or condition, or the accumulation and consequences of a number of non-compliance events or conditions, is significant and is considered worthy of reporting.

Significant breach – where the auditor finds that significant harm has occurred or is beginning to occur to persons or the environment as a result of the non-compliance. A significant breach can also result from the cumulative effect of a number of non-compliance events or conditions.

Identification of a possible significant breach requires the auditor to conduct tests to confirm whether or not there has been a breach. If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Ministers of Forests, Energy & Mines, and Environment, Lands & Parks.

Reporting

Based on the above evaluation, the auditor then prepares the "Report from the Auditor" for submission to the Board. The party being audited is given a draft of the report before it is submitted to the Board so that the party is fully aware of the findings. The party is also kept fully informed of the audit findings throughout the process, and is given opportunities to provide additional relevant information and to ensure the auditor has complete and correct information.

Once the auditor submits the report, the Board reviews it and determines whether any party or person is potentially adversely affected by the audit findings. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report to the public and government. The representations allow potentially adversely affected parties to present their views to the Board.

At the discretion of the Board, representations may be written or oral. The Board will generally offer written representations to potentially adversely affected parties, unless the circumstances strongly support the need for an oral hearing.

The Board then reviews both the report from the auditor and the representations before preparing its final report, which includes the Board's conclusions and, if appropriate, recommendations.

If the Board's conclusions or recommendations result in newly adversely affected parties or persons, additional representations would be required.

Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

Report from the Auditor

C. Report from the Auditor

1.0 Introduction

As part of the Forest Practices Board's 2000 compliance audit program, the Ministry of Forests Small Business Forest Enterprise Program (SBFEP) in the Kamloops Forest District was selected for audit from the population of Small Business Forest Enterprise Programs within the province. The Kamloops Forest District SBFEP was selected randomly and not on the basis of location or level of performance.

The SBFEP is a program within which the Ministry of Forests awards timber sale licences to small business operators. The Ministry of Forests and the individual licensees each have separate but inter-related roles and responsibilities within the program:

- The district manager is responsible for the overall management and performance of the SBFEP. This includes preparing and giving effect to the forest development plan[i] and silviculture prescriptions,[ii] some construction, maintenance and deactivation of roads, as well as meeting silviculture obligations. The district manager can also choose to prepare and give effect to logging plans[iii] that small business licensees must follow.
- The small business licensees who have been awarded timber sale licences (TSL holders) through the SBFEP have a number of legal responsibilities, as reflected in their timber sale licence and other permits (road permits and road use permits). These responsibilities may include preparing and obtaining approval of logging plans; some construction, maintenance and deactivation of roads; and ensuring that all operations, including harvesting, are carried out in compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code).

The district responsibilities and individual TSL holders' responsibilities and performance are closely linked. The planning done by the district can impact directly on the TSL holder's ability to adequately carry out its responsibilities. The quality of a licence holder's timber harvesting activities can affect a district's ability to adequately carry out its work, such as meeting silviculture obligations, after logging is completed.

The Kamloops SBFEP operates within the Kamloops Forest District, which is located in the southern interior of British Columbia. The SBFEP has 20 defined operating areas, spread throughout the district from Dunn Lake in the north to Stump Lake in the south, and from Adams Lake in the east to Hat Creek Valley in the west. The major towns in the district are Kamloops, Cache Creek, Barriere and Chase (refer to attached map).

The Kamloops SBFEP has an allowable annual cut of 234,250 cubic metres. The actual volume cut during the audit period was approximately 365,000 cubic metres. The majority of this harvest related to a significant mountain pine beetle outbreak. Trees killed by mountain pine beetle were harvested to salvage the timber, and other trees attacked by mountain pine beetle were harvested to control the spread of mountain pine beetle infestations.

2.0 Audit Scope

The audit examined the planning and field activities related to timber harvesting and the construction, maintenance and deactivation of roads for the period September 1, 1999, to September 10, 2000. This included examining operational plans, such as forest development plans, silviculture prescriptions and logging plans, that supported the activities examined during the audit period. These activities were assessed for compliance with the *Forest Practices Code of British Columbia Act* and related regulations.

The activities carried out by the Kamloops SBFEP during the audit period, and therefore subject to audit, were:

- harvesting on 50 cutblocks for competitively-tendered timber sale licences
- harvesting on 71 directly-awarded small scale salvage timber sale licences
- construction of 11 road sections totalling 40.5 kilometres
- maintenance of 7 bridges and approximately 800 kilometres of road, involving activities such as surfacing roads and cleaning culverts and ditches
- maintenance of 66 semi-permanently deactivated road sections totalling approximately 140 kilometres
- deactivation of 3 road sections totalling 9 kilometres

The activities carried out by the Kamloops SBFEP during the audit period were approved under the 1999 - 2003 Forest Development Plan and related amendments to the plan. In addition, a total of 45 silviculture prescriptions and the layout and design for 6 road sections were approved during the audit period.

Activities in the district fall under the scope of the Kamloops Land and Resource Management Plan (KLRMP), which was declared a higher level plan under the Code in January 1996. As a result, planning and practices of the SBFEP are required to be consistent with the KLRMP.

A significant mountain pine beetle outbreak started in 1998 in the Kamloops Forest District. In addition to harvesting beetle-infested timber in traditional SBFEP operating areas, the district SBFEP assisted several major licensees in harvesting infested timber on portions of their operating areas. These additional harvesting areas were included in the scope of the audit.

Section 3.0 describes the results of the audit. The Board's, *Compliance Audit Reference Manual, Version 4.1, May 2000* sets out the standards and procedures that were used to carry out the audit.

3.0 Audit findings

Planning and practices examined

The audit work on selected cutblocks and roads included ground-based procedures and aerial assessments using helicopters. The audit examined the following practices:

- harvesting practices on 20 cutblocks and their related operational plans

- harvesting practices on 14 directly awarded small scale salvage sales, of which 6 were exempt from the requirement for silviculture prescriptions and 8 were approved under amendments to existing silviculture prescriptions
- construction of 5 road sections totalling 8 kilometres
- maintenance of 3 bridges and approximately 60 kilometres of road
- maintenance of approximately 10 kilometres of semi-permanently deactivated road
- deactivation of 3 road sections totalling 9 kilometres

The audit also examined the relevant components of the 1999 - 2003 Forest Development Plan and its approved amendments, including its consistency with the KLRMP. In addition, the audit examined silviculture prescriptions for 11 cutblocks where harvesting had not yet started, and plans and layout for 2 road sections that had not been constructed.

Findings

The audit found that the Kamloops SBFEP complied, in all significant respects, with the Code requirements for timber harvesting and the construction, maintenance and deactivation of roads. The instances of non-compliance were few in number and minor in nature.

4.0 Audit Opinion

In my opinion, the timber harvesting and the construction, maintenance and deactivation of roads carried out by the Kamloops Forest District Small Business Forest Enterprise Program, from September 1, 1999, to September 10, 2000, were in compliance, in all significant respects, with the Code requirements as of September 2000.

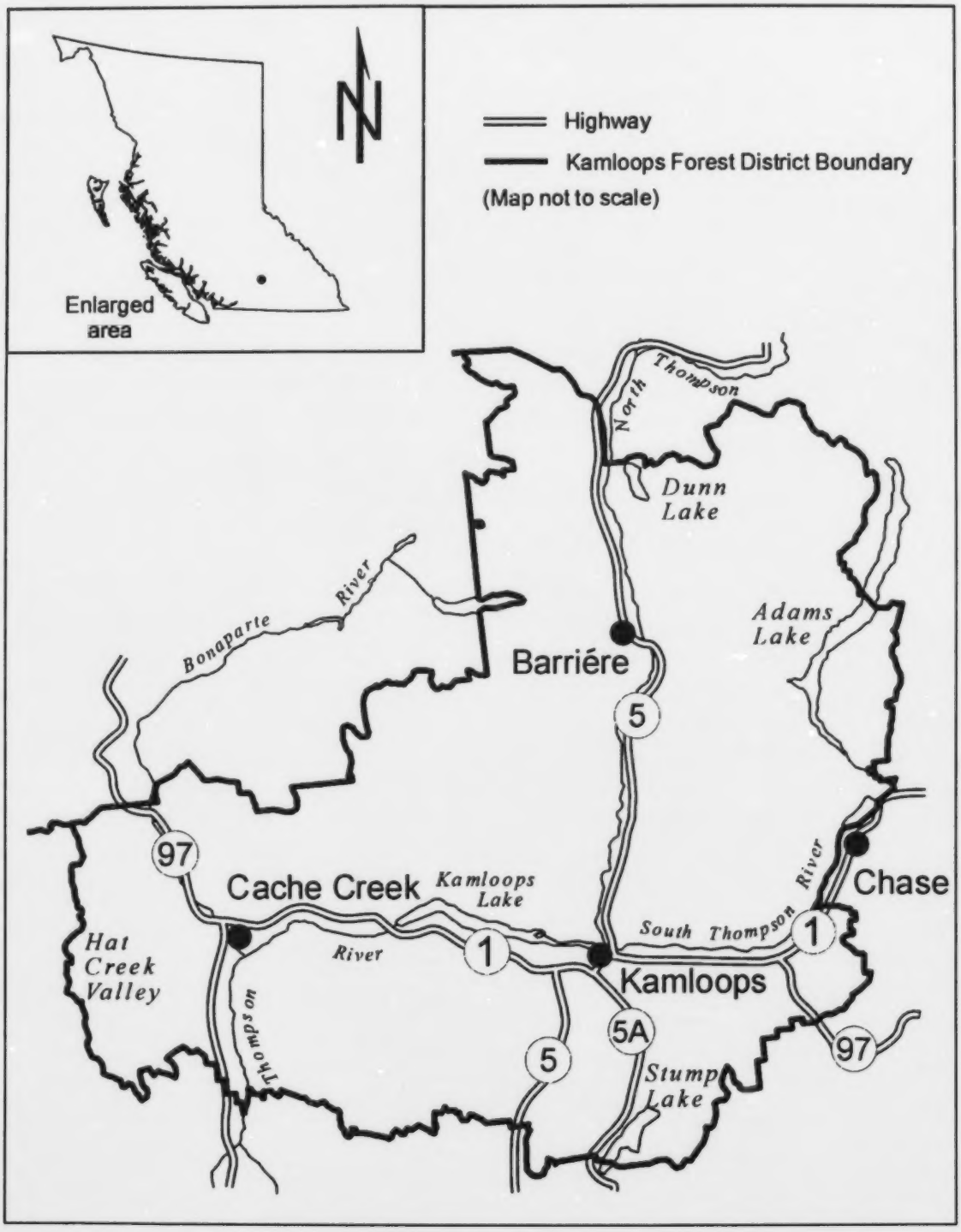
In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not have been detected by the audit, or that were detected but not considered worthy of inclusion in the audit report.

Sections 2.0 and 3.0 of this report from the auditor describe the basis of the audit work performed in reaching the above opinion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall opinion of compliance with the Code.

Sylvi D. Holmsen, RPF
Auditor of Record

Vancouver, British Columbia
December 22, 2000

Audit of Kamloops Forest District
Small Business Forest Enterprise Program



Endnotes

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[i] A forest development plan is an operational plan that provides the public and government agencies with information about the location and scheduling of proposed roads and cutblocks for harvesting timber over a period of at least five years. The plan must specify measures that will be carried out to protect forest resources (including water, fisheries, and other forest resources). It must also illustrate and describe how objectives and strategies established in higher level plans, where they have been prepared, will be carried out. Site specific plans are required to be consistent with the forest development plan.

[ii] A silviculture prescription is a site-specific operational plan that describes the forest management objectives for an area to be harvested (a cutblock). The silviculture prescriptions examined in the audit are required to describe the management activities proposed to maintain the inherent productivity of the site, accommodate all resource values, including biological diversity, and produce a free growing stand capable of meeting stated management objectives. Silviculture prescriptions must be consistent with forest development plans that encompass the area to which the prescription applies.

[iii] A logging plan is an operational plan that details how, when, and where timber harvesting and road construction activities will take place in a cutblock, in accordance with the approved silviculture prescription and forest development plan for the area. Information about other forest resource values, plus all current field information for the area, must be clearly shown in the logging plan. The requirement to prepare logging plans was repealed on June 15, 1998, but may be in effect in limited circumstances. Logging plans approved before June 15, 1998, continue to be in effect until timber harvesting is complete.